

RISK ASSESSMENT: MECHANICAL & BICYCLE REPAIRS

Venue: Shalford Upper Village Hall

Assessment Date: 12th September 2026

Assessor: Eric Stammers

Review Date: September 2027 (or following any safety incident)

1. PURPOSE & SCOPE

This risk assessment covers all activities relating to the inspection, tuning, mechanical adjustment, tyre replacement, brake/gear cable servicing, and minor assembly of bicycles and small mechanical items. It applies specifically to volunteer repairers and visiting members of the public within the designated mechanical station inside (and directly outside) the Village Hall.

2. RISK RATING SYSTEM

Likelihood: 1 (Rare), 2 (Unlikely), 3 (Possible), 4 (Likely), 5 (Almost Certain)

Severity: 1 (Negligible/Minor Cut), 2 (Minor Injury/First Aid), 3 (Moderate/Medical Treatment), 4 (Major Injury/Hospitalisation), 5 (Fatality)

Risk Level: Likelihood × Severity

1 to 4: Low Risk (Acceptable, monitor regularly)

5 to 11: Medium Risk (Controls must be strictly enforced)

12 to 25: High Risk (Stop activity until stronger controls are in place)

3. HAZARD REGISTER & CONTROL MEASURES

HAZARD 1: Unstable Bicycles Tipping Over (Crushing & Impact Injuries)

People at Risk: Volunteer Mechanics, Visitors, Children.

Specific Risks: Bicycles falling off tables or collapsing mid-repair, causing bruising, broken toes, or damage to other stations.

Initial Risk Rating: Medium (Likelihood 4 × Severity 2 = 8)

Mandatory Control Measures:

Mechanical Repair Stands: Bicycles must never be balanced upside down on standard village hall folding tables. Mechanics must use a purpose-built, heavy-duty mechanical floor stand to lift and clamp the bike frame securely.

Stable Footing: Ensure the stand's tripod base is fully extended and positioned on a flat, non-slip section of the floor away from high-traffic walkways.

No Heavy Lifting onto Tables: If a heavy e-bike or cargo bike is brought in, it must be worked on directly at floor level, never lifted onto tables.

Residual Risk Rating: Low (Likelihood 2 × Severity 1 = 2)

HAZARD 2: Pinch Points, Trapped Fingers, and Moving Components

People at Risk: Volunteer Mechanics, Curious Visitors/Children.

Specific Risks: Getting fingers crushed, pinched, or lacerated in spinning bicycle wheels, tight drive chains, chainrings, cassettes, or folding mechanisms.

Initial Risk Rating: Medium (Likelihood 4 × Severity 2 = 8)

Mandatory Control Measures:

Clear Communication: The mechanic must explicitly warn the visitor to keep hands clear before spinning pedals, wheels, or testing gears.

Safe Zone Layout: Set up the workbench barriers so that visitors can only watch from the front of the bench, opposite the active moving parts of the drivetrain.

Tool Use for Tensioning: Use correct tools (like cable pullers or chain tools) instead of pulling parts with raw hand strength, which can cause hands to slip into sharp components.

Residual Risk Rating: Low (Likelihood 2 × Severity 1 = 2)

HAZARD 3: Flying Debris and Sharp Objects

People at Risk: Volunteer Mechanics, Visitors.

Specific Risks: High-tension brake/gear cables fraying and piercing skin or eyes, snapped spokes under tension, or dirt/rust flying off wheels during cleaning.

Initial Risk Rating: Medium (Likelihood 3 × Severity 3 = 9)

Mandatory Control Measures:

Eye Protection: Safety glasses must be worn when cutting inner cables, tensioning spokes, or using wire brushes to clear rust.

Cable End Caps: All replaced or trimmed cables must be immediately fitted with a crimped metal end cap to prevent dangerous fraying.

Safe Discarding: Snapped cable ends, old spokes, and sharp wire clips must be thrown straight into a designated hard-walled scrap bin at the station.

Residual Risk Rating: Low (Likelihood 1 × Severity 2 = 2)

HAZARD 4: Chemical Exposure and Floor Slipping (Lubricants & Cleaners)

People at Risk: All Village Hall Users (Slips on hard floors).

Specific Risks: Degreasers, chain oils, and brake fluids spilling onto the polished village hall floor, causing severe slip hazards, or causing skin irritation.

Initial Risk Rating: Medium (Likelihood 4 × Severity 2 = 8)

Mandatory Control Measures:

Floor Protection mats: A heavy-duty rubber mat, tarpaulin, or thick cardboard sheets must be laid down underneath the bike stand to catch any stray drops of oil, grease, or dirt.

No Aerosol Sprays Indoors: Aerosol degreasers, lubricants (like WD-40), or spray cleaners are banned inside the hall. Only drip-feed oils or liquid cleaners applied directly to a cloth are permitted indoors.

Spill Kit: A cleanup roll (blue roll) and a degreasing floor cleaner must be kept at the station to wipe up any spills instantly.

Residual Risk Rating: Low (Likelihood 2 × Severity 1 = 2)

HAZARD 5: In-Hall Accidents (Indoor Test Riding)

People at Risk: Volunteers, Visitors, Vulnerable Hall Users.

Specific Risks: Visitors or volunteers riding bikes inside the village hall to test brakes or gears, leading to high-speed collisions, structural damage to the hall, or pedestrian injuries.

Initial Risk Rating: High (Likelihood 3 × Severity 4 = 12)

Mandatory Control Measures:

Strict Indoor Riding Ban: No bicycle or scooter may be sat on or ridden inside the village hall under any circumstances.

Outdoor Testing Zone: All test riding must take place outside the building on the designated flat tarmac area (e.g., the village hall car park or courtyard).

Pre-Ride Check: The mechanic must visually confirm that the handlebars and brakes are functional before anyone mounts the bike outside.

Residual Risk Rating: Low (Likelihood 1 × Severity 4 = 4)

4. EMERGENCY PROTOCOLS

In the Event of a Slip or Fall: Do not move the person if they complain of severe back or neck pain. Keep them warm and call a first aider. Clear any liquid spill on the floor immediately to prevent a secondary accident.

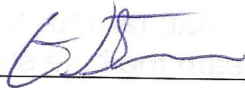
In the Event of a Puncture Wound (Frayed Cable): Encourage the wound to bleed slightly under clean running water to flush out contaminants. Clean with an antiseptic wipe, apply a sterile plaster, and verify if the person's tetanus vaccination is up to date.

In the Event of an Outdoor Collision: Treat any minor scrapes using the first-aid kit. If a visitor collides with a vehicle or pedestrian in the car park, log the incident immediately in the village hall accident book.

5. ASSESSOR SIGN-OFF

By signing below, the Lead Fixer confirms that the controls listed above will be actively set up, checked, and enforced at every scheduled event.

Lead Fixer Name: Eric Stammers

Signature:  Date: 12-9-2026